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| 09/916,273 | 07/30/2001 | Akihiko Takano | HITA.0088 | 7775 |

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EXAMINER

HWANG, JOON H

| ART UNIT | PAPER NUMBER |
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2172

DATE MAILED: 10/06/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/916,273

Applicant(s)

TAKANO ET AL.

Examiner

Joon H. Hwang

Art Unit

2172

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 July 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. The pending claims are 1-20.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3. Claims 1-5 and 13-20 are rejected under 35 U.S.C. 102(e) as being anticipated by Nishioka et al. (U.S. Patent No. 6,457,004).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

With respect to claim 1, Nishioka discloses a document information display means for displaying document identification information received as the results of an initial search (lines 19-60 in col. 7, lines 30-58 in col. 9, lines 41-67 in col. 11, fig. 3, and fig. 6). Nishioka discloses a means for selecting at least a portion of the contents of a

document identified by the document identification information displayed by the document information display means (lines 8-16 in col. 9 and fig. 33A). Nishioka discloses a search button for initiating a subsequent document retrieval using the selected document contents as a query (lines 34-58 in col. 12, lines 19-22 in col. 25, and lines 48-67 in col. 31). Nishioka discloses a means for modifying and confirming a Boolean expression that associates a plurality of words included in the query (lines 19-60 in col. 7, lines 34-58 in col. 12, fig. 3, and fig. 6).

With respect to claim 2, Nishioka discloses a document content display means for displaying the contents of documents identified by the document identification information displayed by the document information display means (fig. 3, fig. 6, fig. 27, and fig. 36).

With respect to claim 3, Nishioka discloses a database selecting part for selecting at least one database to be searched in the subsequent document retrieval, wherein the at least one database is selected from a plurality of databases including keyword-search-type databases and associative-document-search-type databases (fig. 3, fig. 6, lines 25-60 in col. 7, lines 60-67 in col. 10, and lines 59-64 in col. 26).

With respect to claim 4, Nishioka discloses generating topic words for at least a selected portion of a document concerning summarizing means (lines 30-46 in col. 9, lines 59-67 in col. 12, fig. 6, and fig. 33A).

With respect to claim 5, Nishioka disclose the initial search is a keyword search and the subsequent document retrieval is an associative-document-type search (lines 25-60 in col. 7, lines 8-16 in col. 9, lines 10-41 in col. 30, and fig. 6).

With respect to claim 13, Nishioka discloses receiving search results from a search server identifying at least one document (line 50 in col. 5 thru line 9 in col. 6, lines 30-46 in col. 9, and fig. 6), specifying at least a part of a document identified in the search results as a query for a database search (lines 8-16 in col. 9 and fig. 33A), sending search request to the search server requesting to search at least one keyword-type database using the query (lines 10-41 in col. 30, lines 56-62 in col. 24, fig. 3, and fig. 6), modifying and confirming a Boolean expression created by the search server which associates words in the query (lines 19-60 in col. 7, lines 10-41 in col. 30, fig. 6, fig. 46, and fig. 47), and sending the confirmed Boolean expression to the search server (lines 55-59 in col. 10 and fig. 1).

With respect to claim 14, Nishioka discloses sending a request to perform a keyword search in at least one keyword-search-type database (lines 19-60 in col. 7, lines 55-59 in col. 10, lines 36-58 in col. 12, and fig. 6), receiving document identification information as search results (lines 30-58 in col. 9, lines 32-67 in col. 11, and fig. 6), specifying at least a part of the contents of the identified search result documents (lines 8-16 in col. 9 and fig. 6), and sending search request to perform a document retrieval in at least one associative-document-search-type database using at least a part of the specified document content as a query (lines 8-16 in col. 9, lines 20-23 in col. 25, line 48 in col. 31 thru line 29 in col. 32, and fig. 6).

With respect to claim 15, Nishioka discloses sending a request to perform a document retrieval from at least one associative-document-search-type database (lines 19-60 in col. 7, lines 34-58 in col. 12, and fig. 6), receiving document ids and document

information including words characterizing the contents of the documents as search results (lines 30-58 in col. 9, line 32-67 in col. 11, and fig. 6), selecting at least one word from among the received words (lines 59-67 in col. 12 and fig. 6), and sending a search request to perform a keyword search in at least one keyword-search-type database using the selected words as a query (lines 55-59 in col. 10, lines 56-62 in col. 24, lines 10-41 in col. 30, and fig. 6).

With respect to claim 16, Nishioka discloses creating a summary from words extracted from at least a part of a document when the at least a part of the document is specified as a search term (lines 30-46 in col. 9, lines 48-56 in col. 11, lines 59-67 in col. 12, fig. 6, and fig. 33A) concerning a summarizing means and sending the summary created by the summarizing means to a specified associative-document-search-type database as a query (lines 25-60 in col. 7, lines 8-16 in col. 9, lines 59-64 in col. 26, lines 10-41 in col. 30, and fig. 6) concerning query constructing means.

With respect to claim 17, Nishioka teaches topic word requesting means for requesting the associative-document-search-type database to create a summary representation of the contents of a document corresponding to a document ID when the document ID is returned from the associative-document-search-type database as a search results, wherein the query constructing means is adapted to send summaries obtained from the associative-document-search-type database by the topic word requesting means to at least one additional associative-document-search-type database as a query (lines 25-60 in col. 7, lines 30-46 in col. 9, lines 48-56 in col. 11, lines 59-67 in col. 12, lines 59-64 in col. 26, lines 10-41 in col. 30, fig. 6, and fig. 33A).

With respect to claim 18, Nishioka discloses merging a plurality of document summaries to create a set of topic words when the plurality of document summaries are returned from an associative-document-search-type database in response to a request from the topic word requesting means (lines 25-60 in col. 7, lines 30-46 in col. 9, lines 48-56 in col. 11, lines 59-67 in col. 12, fig. 2, fig. 6, fig. 10, fig. 27, fig. 28A, fig. 31B, and fig. 47) concerning search result merging means.

With respect to claim 19, Nishioka discloses the search server adapted to send a document retrieval request to at least one keyword-search-type database and at least one associative-document-search-type database in response to a single search request from the document retrieval terminal (line 38 in col. 5 thru line 24 in col. 6, lines 25-60 in col. 7, lines 34-58 in col. 12, lines 59-64 in col. 26, fig. 1, and fig. 6).

With respect to claim 20, Nishioka discloses means for requesting confirmation of a Boolean search request for a keyword-search-type database from the document retrieval terminal before issuing the request to the database (lines 25-60 in col. 7, lines 8-16 in col. 9, lines 34-58 in col. 12, lines 10-41 in col. 30, fig. 1, and fig. 6).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 6, 7, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa et al. (U.S. Patent No. 5,987,460).

With respect to claim 6, Niwa discloses a document information display part for displaying document information received as search results (lines 30-36 in col. 4, lines 18-56 in col. 5, lines 18-60 in col. 6, fig. 3, and fig. 4). Niwa discloses a topic word display part for displaying topic words included in documents referenced in the document information display part (lines 30-38 in col. 2, lines 3-8 in col. 4, lines 29-67 in col. 7, and fig. 8). Niwa further discloses an analysis for extracting and displaying topic words for a subject document can be run (lines 21-35 in col. 9). Niwa discloses word selecting means for selecting words displayed in the topic word display part (lines 22-37 in col. 16 and lines 31-42 in col. 17). Niwa discloses a first search start button for initiating a document retrieval by using the words selected by the word selecting means as a first query (lines 22-37 in col. 16 and lines 31-42 in col. 17). Therefore, based on Niwa, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize topic words extracted from a search result to a subsequent search in order to narrow the search for more relevant results.

With respect to claim 7, Niwa discloses a means for modifying and confirming a Boolean expression that associates a plurality of words included in the first query (line 45 in col. 4 thru line 12 in col. 5 and line 38 in col. 16 thru line 17 in col. 17).

With respect to claim 12, Niwa discloses the topic words are automatically generated on a search server by a summarizing means (lines 31-38 in co. 2, lines 29-39 in col. 7, lines 14-37 in col. 18, and fig. 21A).

6. Claims 8-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Niwa et al. (U.S. Patent No. 5,987,460) in view of Spencer (U.S. Patent No. 5,826,261).

With respect to claim 8, Niwa discloses the claimed subject matter as discussed above. Niwa teaches any database can be used for searching and retrieving document (lines 12-19 in col. 4). Niwa searches a database based on a keyword (lines 30-44 in col. 4 and lines 18-37 in col. 5). This teaches a keyword-search-type database element. Niwa also searches a database based on a topic extracted from search results (lines 46-67 in col. 1, lines 34-60 in col. 6, lines 29-39 in col. 7, line 58 in col. 9 thru line 11 in col. 10, and lines 22-37 in col. 16). The searching based on a topic teaches associative-document-search-type database elements. Documents are classified in each topic (fig. 10 and fig. 20). Niwa is silent on selecting databases for searching. However, Spencer discloses selecting databases for searching, wherein the databases can be multiple, heterogeneous, distributed, and document databases (lines 54-67 in col. 9, lines 26-29 in col. 18, fig. 1, fig. 6, and fig. 7). Spencer also discloses various search engines teaching various search techniques, such as a document vector based search, which teaches an associative-document-search-type database (lines 44-53 in col. 9 and lines 1-10 in col. 10). Therefore, based on Niwa in view of Spencer, it would have been obvious to one having ordinary skill in the art at the time the invention was made to utilize multiple databases and select databases for searching in order to limit the database to a subset of document databases for more relevant search results.

With respect to claim 9, Spencer further discloses a means for sending information about the selected databases to be searched and query information to a search server (lines 30-61 in col. 18). Therefore, the limitations of claim 9 are rejected in the analysis of claim 8 above, and the claim is rejected on that basis.

With respect to claim 10, Niwa discloses a keyword input part for inputting keywords for a keyword search (lines 30-36 in col. 4 and lines 18-56 in col. 5), document selecting means for selecting documents referenced in the document information display part (lines 18-60 in col. 6), and a second search button for initiating a document retrieval using documents selected by the document selecting means as a second query (lines 18-60 in col. 6, lines 29-39 in col. 7, lines 22-37 in col. 16, and lines 31-42 in col. 17). Niwa further discloses an analysis for extracting and displaying topic words for a subject document can be run (lines 21-35 in col. 9), which teaches a document instead of documents can be utilized in searching.

With respect to claim 11, Niwa discloses document content display means for displaying the contents of a document referenced in the document information display part (lines 18-60 in col. 6), means for registering at least a portion of documents displayed by the document content display means (line 61 in col. 6 thru line 28 in col. 7, fig. 4, and fig. 10), and a third search button for initiating a document retrieval by using the registered portion as a third query (lines 22-37 in col. 16 and lines 31-42 in col. 17). Niwa further discloses an analysis for extracting and displaying topic words for a subject document can be run (lines 21-35 in col. 9), which teaches a document instead of documents can be utilized in searching.


Art Unit: 2172

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joon H. Hwang whose telephone number is 703-305-6469. The examiner can normally be reached on 9:30-6:00(M~F).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kim Y Vu can be reached on 703-305-4393. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-3900.

Joon Hwang
9-30-03



KIM VU
SUPERVISORY PATENT EXAMINER
THE BIOLOGY CENTER